ABSTRACT OF THE DISCLOSURE

A stacked photovoltaic element contains a structure formed by sequentially arranging a metal layer, a lower transparent conductive layer, a first n-layer of non-single-crystal silicon, a first i-layer of microcrystal silicon, a first p-layer of non-single-crystal silicon, a second n-layer of non-single-crystal silicon, a second i-layer of microcrystal silicon and a second p-layer of non-single-crystal silicon on a support body. The first i-layer and the second i-layer are made to contain phosphor and the content ratio R1 of phosphor to silicon of the first i-layer and the content ratio R2 of phosphor to silicon of the second i-layer are defined by the formula of $R2 < R1$. With this arrangement, photovoltaic elements showing a high conversion efficiency can be manufactured with a high yield factor.